

Tuesday, 12/18/2007 10:51:15 AM
Kim Johnston

Process Sheet

ner : CU-DAR001 Dart Helicopters Services Drawing Name : ARM
 Number : 36421
 Estimate Number : 12884
 P.O. Number :
 This Issue : 12/18/2007 S.O. No. :
 Prsht Rev. : NC Part Number : D3560044
 First Issue : 1/1 Type : MACHINED PARTS Drawing Number : D3560 UNDER REVIEW
 Drawing Revision :
 Material :
 Due Date : 1/10/2008 Qty: 10 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est Rev:A New Issue 07.05.24 EC
 Est Rev B ECN 987 07.10.09 EC verified by DD

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 M6061T6B0500X05000 6061-T6 Bar .50" x 5.0"



Comment: Qty.: 1.3598 f(s)/Unit Total: 13.5975 f(s)

6061-T6 Bar 0.50" x 5.00"

Batch: M106747

J.L 08/02/11

2.0 BAND SAW BAND SAW



Comment: BAND SAW

Cut blanks 15.500" long

J.L 08/02/11

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA696 Rev: AA & Dwg D3560 Rev: D

2-C'sink 0.196" hole on manual mill as per dwg D3560

3-Deburr per dwg D3560

J.L 08/02/11

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.L 08/02/11

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

J.F 08/02/11 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						<i>[Signature]</i>	

Part No: D3560-044 PAR #: NA Fault Category: Prod/Manufact Park NCR: Yes No DQA: AD Date: 08/01/11
 QA: N/C Closed: _____ Date: _____

NCR: <u>36421</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>08/02/11</u>	<u>3</u>	<u>1 part is scrapped $\phi .507^{+0}_{-.001}$ are .510 P.C: -operator error, too large of tool bore.</u>	<i>[Signature]</i>	<u>- script replace</u> <u>Qty (1)</u> <u>B# M106747</u>	<u>J.L</u> <u>08/02/11</u>	<i>[Signature]</i> <u>08/01/11</u>	<i>[Signature]</i>	<i>[Signature]</i> <u>08/01/11</u>

NOTE: Date & initial all entries

Date: Tuesday, 12/18/2007 10:51:15 AM
User: King Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 36421

Part Number: D3560044

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

D35921

PLATE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)
PLATE *B.35331* *(2x)*

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld assembly as per dwg D3560

STEP:

- 1- clean material (buff bracket and bottom of arm with blue pad) *SP*
- 2- set up bracket and arm on jig *SP*
- 3- preheat bracket and arm with torch *SP*
- 4- clean before welding with brush *SP*
- 5- set up machine to 135 amps *SP*
- 6- weld across bottom and top ends *SP*
- 7- reheat with torch (65 deg C) *SP*
- 8- on one side weld from bottom to top half way *SP*
- 9- same for other side (half way) *SP*
- 10- from half way point weld the rest of the first side (ease off pedal near end) *SP*
- 11- same for remaining side (ease off pedal near end) *SP*

SP 08.08.15 (2x)

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Job 15 (2)

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

Pl 08.08.15
08/08/15

(2x)

HAND FINISHING1

HAND FINISHING RESOURCE #1



HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SP 08.08.15 (2x)

NOTE: Date & Initial
H-I-FORMS/Quality Assurance/Approved QAIWON

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

all entries

Date: Tuesday, 12/18/2007 10:51:15 AM
User: Kip Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 36421

Part Number: D3560044

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-08-15 2

12.0

D2808

Spacer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Spacer

batch: B37113

08/08/18 (2)

13.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Press bushing in D3560 arm per dwg D3562

08/08/18 (2)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08-08-18 (2)

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: NA

08-08-28

16.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/08/29

Job Completion



MF 08-08-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

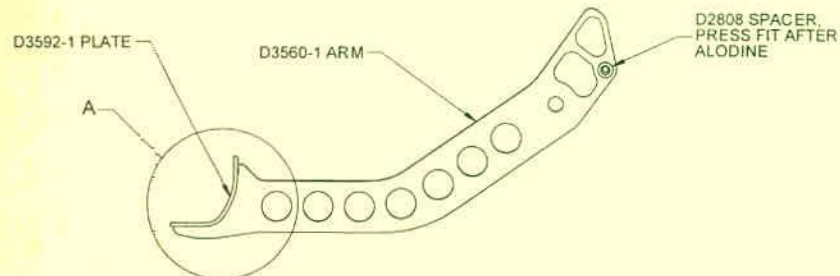
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QA: N/C Closed: _____ Date: _____

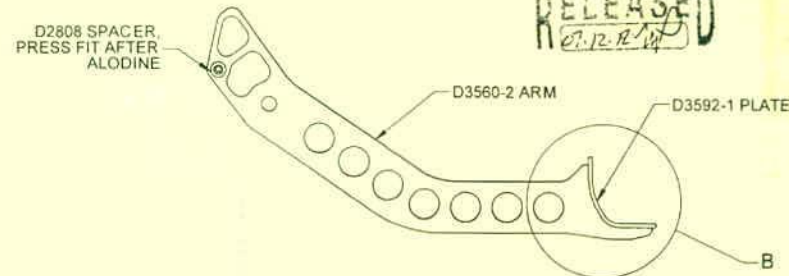
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

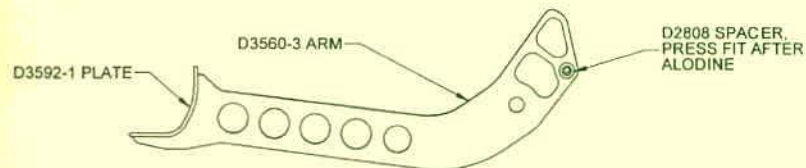
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27.12.2014



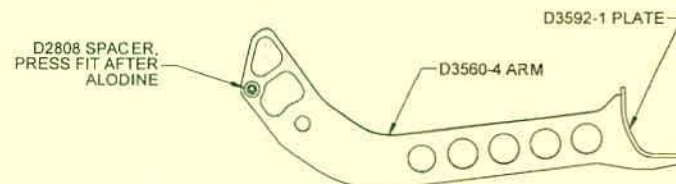
D3560-041 ARM WELDMENT



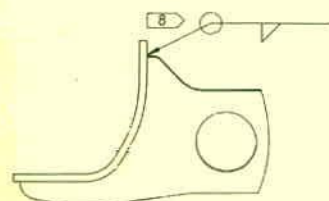
D3560-042 ARM WELDMENT



D3560-043 ARM WELDMENT



D3560-044 ARM WELDMENT



**DETAIL A
SCALE 1:2**

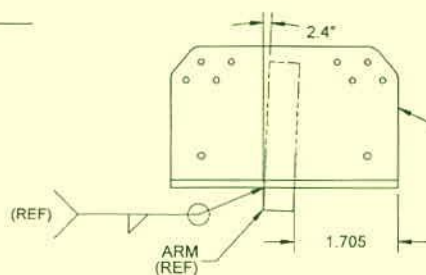
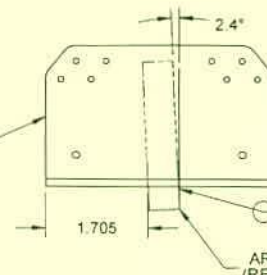
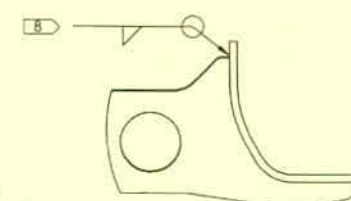


PLATE
(REF)



ARM
(REF)



**DETAIL B
SCALE 1:2**

PARTS LIST

QTY -041	QTY -042	QTY -043	QTY -044	P/N	DESCRIPTION
X				D3560-041	ARM WELDMENT
	X			D3560-042	ARM WELDMENT
		X		D3560-043	ARM WELDMENT
			X	D3560-044	ARM WELDMENT
1	1	1	1	D2808	SPACER
1				D3560-1	ARM
	1			D3560-2	ARM
		1		D3560-3	ARM
			1	D3560-4	ARM
1	1	1	1	D3592-1	PLATE

D	ADD D2808 PRESS FIT NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	REMOVE POWDER COAT	CP	07.06.19
B	REDESIGN AS WELDMENT, ADD POCKETS	CP	07.01.15
A	NEW ISSUE	CP	06.09.25
REV.	DESCRIPTION	BY	DATE
DESIGN	JPC		
DRAWN	JPC		
CHECKED	JPC		
MFG. APPR.	JPC		
APPROVED	JPC		
DE APPR.	JPC		
DATE	07.11.16		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3560 TITLE ARM WELDMENT REV. D SHEET 1 OF 5 SCALE 1:4 <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.23 lbs (TYP)
- 8) WELDING: PER DART QSI C04

NO
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DART AEROSPACE LTD		Work Order:	
Description: Arm		Part Number:	D3560-4
Inspection Dwg: D3560	Rev: B	Page 1 of 1	

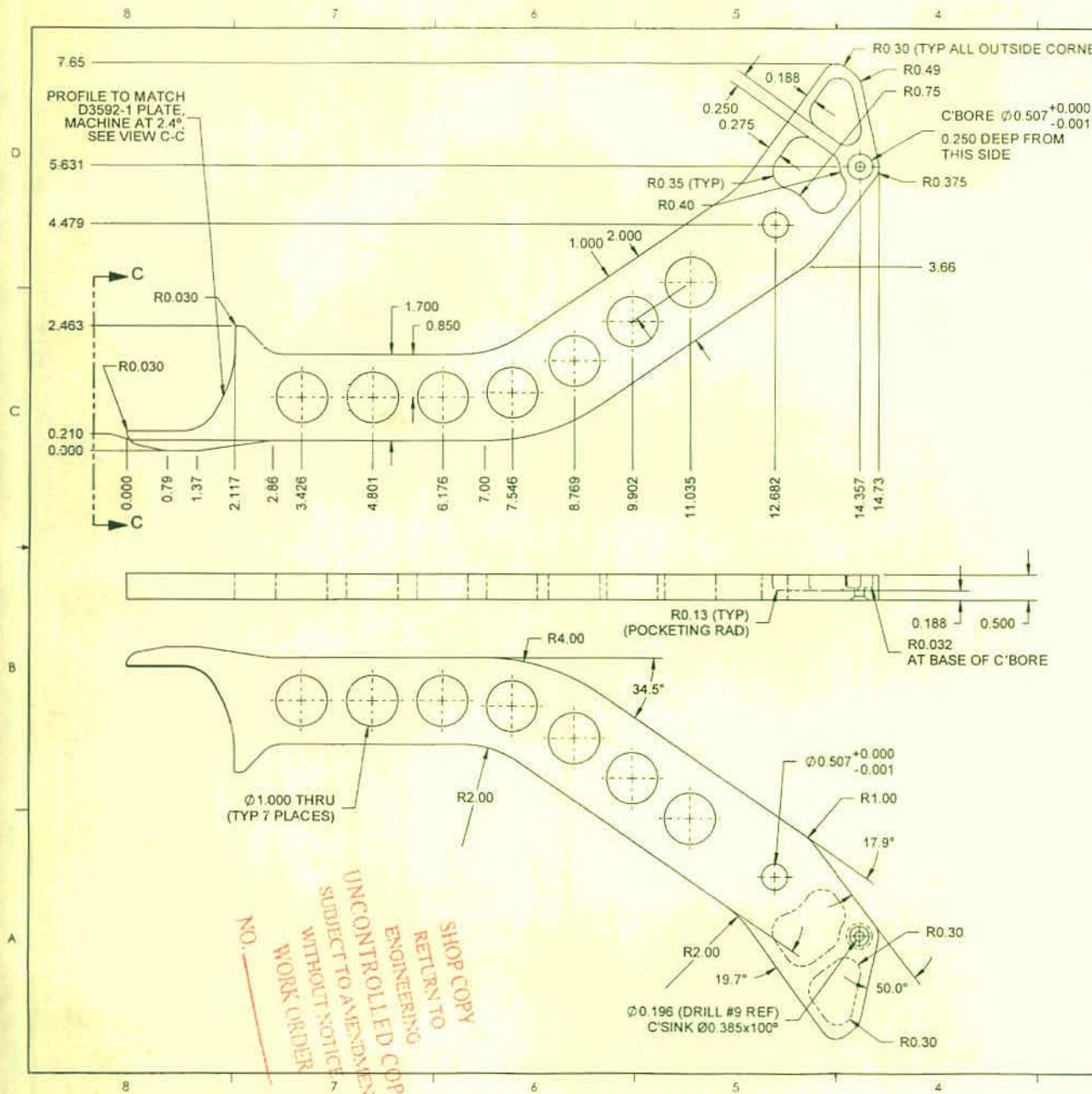
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.507	+0.000/-0.001	.5065	✓			
Ø0.196	+0.005/-0.001	.196	✓			
Ø1.000	+0.010/-0.001	1.007	✓			
Ø0.900	+0.010/-0.001	.904	✓			
0.500	+/-0.010	.495	✓			
0.250	+/-0.010	.249	✓			
0.275	+/-0.010	.275	✓			
0.188	+/-0.010	.187	✓			
2.000	+/-0.010	2.000	✓			
1.750	+/-0.010	1.749	✓			
1.702	+/-0.010	1.701	✓			
Ø0.385 x 100°	+/-0.010 x 0.5°	.375 x 100°	✓			
0.250 Deep	+/-0.010	.250	✓			

Measured by: J.L	Audited by:	Prototype Approval:	N/A
Date: 08/02/11	Date:	Date:	N/A

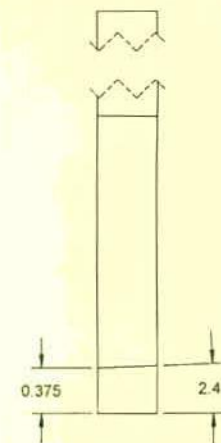
Rev	Date	Change	Revised by	Approved
A	07.01.17	New Issue	KJ/JLM	
B	07.06.13	Dimensions updated per Dwg Rev B	KJ/JLM	BE



D3560-1 ARM WELDMENT

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs

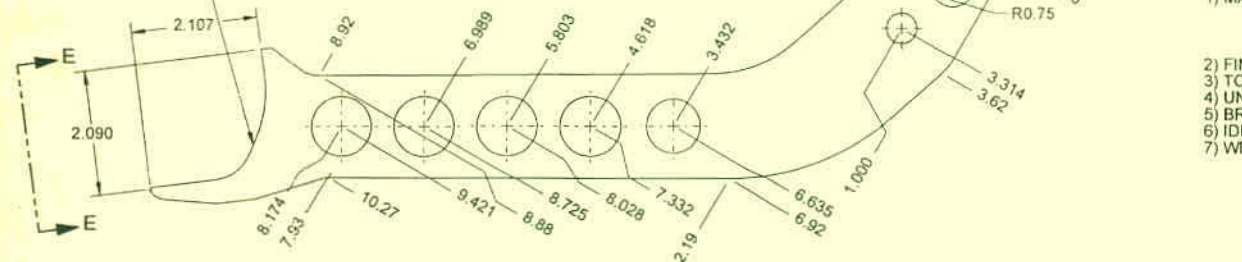


VIEW C-C
SCALE 1:1

RELEASED
07.12.16

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO	REV. D
CHECKED		D3560	SHEET 2 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		ARM WELDMENT	1:2
DE APPR.		COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	07.11.16		

PROFILE TO MATCH
D3592-1 PLATE
MACHINE AT 2.4°
SEE VIEW E-E



D3560-3 ARM

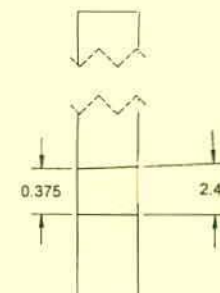
NOTES

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs

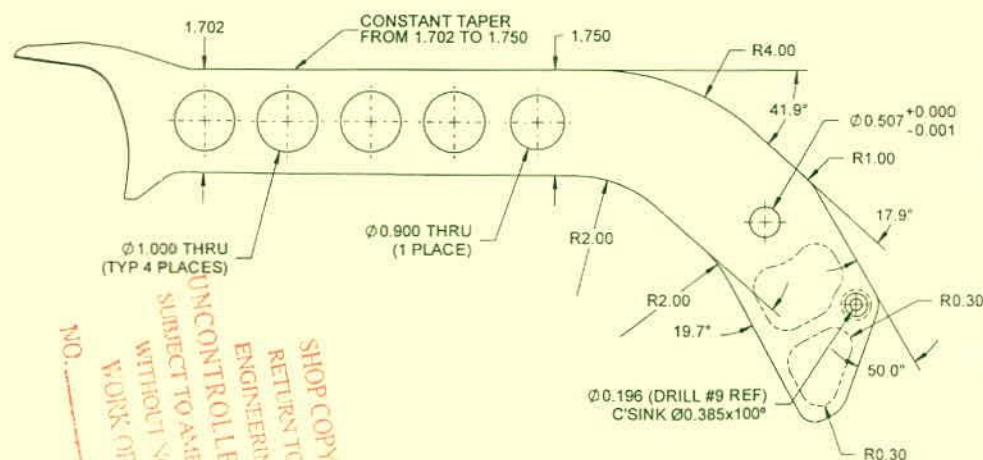
R0.13 (TYP)
(POCKETING RAD)

0.188 0.500

R0.032
AT BASE OF C'BORE

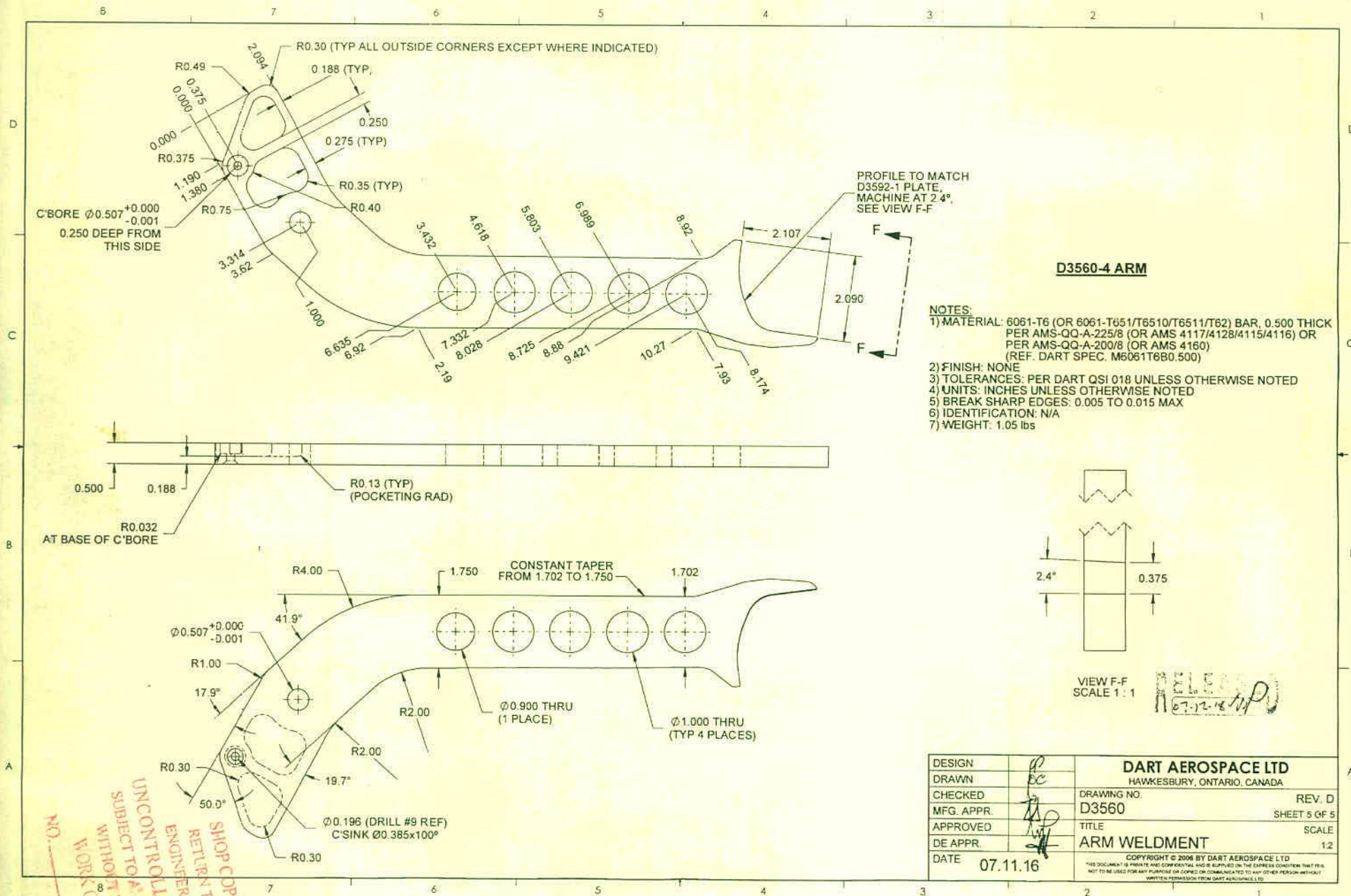


VIEW E-E
SCALE 1:1



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WORK ORDER

DESIGN	qp	DART AEROSPACE LTD	
DRAWN	4c	HAWKESBURY, ONTARIO, CANADA	
CHECKED	4c	DRAWING NO	REV. I
MFG. APPR	4c	D3560	SHEET 4 OF 5
APPROVED	4c	TITLE	SCALE
DE APPR.	4c	ARM WELDMENT	1:
DATE	07.11.16	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
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D3560-4 ARM

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. PART SPEC. M6061TB60.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs

